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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,626

09/12/2006

Hans Graf

GRAF3002/JJC

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23364 7590 02/02/2010

BACON & THOMAS, PLLC

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FOURTH FLOOR

ALEXANDRIA, VA 22314-1176

EXAMINER

HESS, DANIEL A

ART UNIT

PAPER NUMBER

2876

MAIL DATE

DELIVERY MODE

02/02/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,626	Applicant(s) GRAF ET AL.	
	Examiner DANIEL A. HESS	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-22 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-22 and 24-33 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to applicant's filing of 10/13/2009. The examiner acknowledges that at least one element was missing in the examiner's rejection of originally filed claim 2, which has now been incorporated into claim 1. **The applicant's arguments were convincing.** Therefore, a 2nd non-final rejection is made.

Response to Amendment

New art is introduced that is applicable to some of the claims. Tamada et al. (US 5,729,717) teaches an IC card that has a zone access controller which may be considered a freely readable memory, and which grants access to other various other restricted-access areas of the memory of the IC card. An authentication must occur between the data carrier and the reading device involving some kind of access information that is communicated from the reading device to the IC card.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-5, 7-9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Appalucci et al. (US 2003/057276), in view of Tamada et al. (US 5,729,717).

Re claim 1: Attention is drawn to figure 6 of Appalucci. Antenna-based and optical (barcode) data are both available on a tag at once. They are checked against each other. It is noted that data transmission is, broadly, a barcoder reader reading the card and an RFID reader also reading the card.

Lacking in Appalucci is an arrangement wherein the chip has at least one storage area that is freely readable and at least one storage area that is only readable after an authentication of the data carrier and the reading device.

Tamada teaches an IC card that has a zone access controller which may be considered a freely readable memory, and which grants access to other various other restricted-access areas of the memory of the IC card. See column 2, lines 33+: "The zone access controller 22 is also an EEPROM, and stores a password and an access condition for each zone of the memory 24 in the form of a zone access table..." See also (column 5, lines 5-10): "As seen from Table 3, the zones Nos. 1 to 3 require the inputting of a password since password verification must be performed."

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In view of Tamada's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Appalucci et al. the old and well-known freely readable memory which grants access to other various other restricted-access areas of the memory of the IC card as taught by Tamada et al., so that certain areas of the card are made more secure, and also so that different users can experience different levels of access permissions.

Re claim 3: It can be said that in Tamada there is authentication between the data carrier and the reading device since a password for the zone access controller must be supplied at the reading device and then there is a check of this password communicated from the reading device to the accesses controller and checked against the 'freely readable' zone access table. Thus, is there is successful authentication between the reader and a first area of the IC card memory, then access is granted to a second zone of the card.

Re claim 4: There is in Tamada (see figure 2) an encrypted circuit 26. Data that is stored in the protected zones can be encrypted. Encryption of course typically involves a key.

Re claim 5: According to one interpretation, it may be said that the zone access table acts as small-sized access keys that are representative of the full data that is stored in the zone. This is a kind of compression. For analogy, in some kinds of compression, there are representations made for fuller data and the compression are not themselves the full data (compression software must go back and do substitutions to create the full data).

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Re claims 7, 9: Part of Appalucci's teaching is optically readable information in the form of a barcode applied to the data carrier.

Re claim 8: Appalucci teaches barcodes on the carrier and while Appalucci is silent on whether the barcodes are 2D barcodes, it is widely appreciated in the art that barcodes can be 2D barcodes (matrices, normally) for the sake of greater data carrying capacity. For the motivation of greater data carrying capacity, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known 2D barcode on the carrier of Appalucci.

Re claim 15: The checking of an optical and an IC memory-based channel against each other in Appalucci constitutes authentication using two channels.

Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Appalucci et al./Tamada et al. as applied to claim 1 above, in view of Cato (US 5,874,724).

Lacking in Appalucci / Tamada is a feature where the function of the chip on the data carrier depends on light incoming to a light sensor.

Cato teaches (see whole document) an arrangement where the function of the chip on the data carrier depends on light incoming to a light sensor.

In view of Cato's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known arrangement where the function of the chip depends on light reaching a light sensor so that a card cannot be read

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improperly, sight unseen. Note that while Cato emphasizes light frequency, intensity is also important; if intensity is too low, the card will not respond.

Claims 10, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Appalucci/Tamada as applied to claim 1 above, in view of Pitroda (US 5590038).

Re claims 10, 11: Pitroda teaches (see figure 1) the relatively common arrangement where optical information (data) is displayed on an LCD screen of a card.

In view of Pitroda's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known LCD screen on a card in order to allow optical data to be variable and also to communicate visually with a cardholder. A display can serve as a user interface, as in Pitroda.

Re claim 13: Pitroda teaches (see ref. 16 of figure 1) a speaker on a card.

In view of Pitroda's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known speaker in order to aid the blind who may use the card.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Appalucci / Tamada as applied to claim 1 above, in view of Welte et al. (US 2005/0184150).

Lacking in Appalucci / Tamada is a teaching of a vibration sensor on a card.

Welte et al. teaches (paragraphs 0024 and 0025) that a vibration sensor maybe on objects such as cards to increase security.

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In view of Welte's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known vibration sensor to determine those times when card theft is a risk.

Allowable Subject Matter

Claim 16-22 and 24-33 are allowed.

The prior art of record fails to teach or fairly suggest an arrangement wherein for reading to be achieved in a protected area of a contactless data carrier, two separate first reads take place, one read from a freely readable memory area of the contactless data area and another read from an optically readable area of the contactless data carrier. It is noted that the freely readable memory area and the optically readable area are not the same but are separate and distinct data areas. Independent claims 16 and 27 recite that these are two distinct data areas that are separately checked, one optical, before a protected memory area on the card can be accessed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL A. HESS whose telephone number is (571)272-2392.

The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel A Hess/

Primary Examiner, Art Unit 2876